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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/786,197 | 02/25/2004 | Gregory W. Morton | 29466.00 | 3689 |

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| EXAMINER |
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NGHIEM, MICHAEL P

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| ART UNIT | PAPER NUMBER |
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2863

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,197

Applicant(s)

MORTON ET AL.

Examiner

Michael P. Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-101 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-13, 51-54 and 57-64 is/are allowed.
6) ☒ Claim(s) 14, 16, 18, 23, 27, 30, 38, 55, 56, 65 and 67-84 is/are rejected.
7) ☒ Claim(s) 15, 17, 19-22, 24-26, 28, 29, 31-37, 39-50, 66 and 85-101 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

In view of Applicant's traversal, filed on October 24, 2005, to the restriction requirement, filed on September 22, 2005, the restriction requirement is hereby withdrawn.

Drawings

The drawings are objected to because the sources and destinations are not shown (Figs. 5-37). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1, 6-8, 10-12, 31-37, 49, 50, 58-61, 66, 67, 72-74, 76, 81-83, 85-88, 93, and 99-101 are objected to because of the following informalities:

- claims 1, 6-8, 10-12, 31-37, 49, 50, 58-61, 66, 67, 72-74, 76, 81-83, 85-88, 93, and 99-101, the recalibrating step lacks antecedent basis. Where is the calibrating step?
- claim 8, "414includes" should be – 414 --.
- claim 93, "408a" should be – a --.
- claim 93, "said set of deviating data" lacks antecedent basis.
- "RTD" throughout the claims is not defined.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 67-83 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 67, is merely "providing for" a tangible result? For instance, "providing for loading a data set from a data storage unit" recites a loading capability but does not necessarily mean that the data set is loaded from the data storage unit. Thus, nothing has been stored, displayed, or used in any tangible manner. Therefore, it raises a question as to what the tangible result of the "providing for" step is.

Claim 76 seems to be claiming or directed to a computer program to execute a process (i.e. a computer programmed to execute a process). Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process. Without the computer-readable medium needed to realize the computer program's functionality, the computer program is treated as nonstatutory functional descriptive material. See MPEP 2105(III)(1)(a).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 16, 18, 23, 27, 30, 38, 55, 56, 65, and 84 are rejected under 35 U.S.C. 102(b) as being anticipated by Provost et al. (US 5,105,372).

Regarding claims 14, 55, 65, and 84, Provost et al. discloses an apparatus (Fig. 4) for automating cross calibrations of plant instruments (column 1, lines 19-25), said apparatus comprising:

- a processor (processor of data processing system) in communication with a data storage system (memory of data processing system), said data storage system being a part of a plant computer system (since system of Fig. 4 monitors plant), said processor programmed to execute a process including:

- loading a data set from said data storage system (measurements are loaded into a Kalman Filter, Fig. 4), said data set including a plurality of measured process values from a plurality of instruments (series of individual components, column 3, lines 18-19),

- selecting for analysis a set of data from said data set (Abstract, lines 4-5),
 - removing a set of deviating data from said set of data (Abstract, lines 4-5), and
 - analyzing a set of remaining data for cross-calibration of said plurality of instruments (Abstract, lines 6-7, 19-21).

Regarding claim 16, Provost et al. discloses calculating at least one average from said data set (column 4, lines 51-52).

Regarding claim 18, Provost et al. discloses selecting said set of data consisting of a plurality of data points that fall within a specified range (data, Abstract, line 3, is deemed to be within a specified range).

Regarding claim 23, Provost et al. discloses building at least one table of correction deviations (Table 6, columns 17, 18).

Regarding claim 27, Provost et al. discloses after said process step of analyzing said set of remaining data, a process step of generating a report (column 12, lines 42-45).

Regarding claim 30, Provost et al. discloses generating a thermocouple report (sensor output, column 12, lines 55-64).

Regarding claim 38, Provost et al. discloses providing a user interface for interacting with an operator of said processor (user interface of computer-based performance data analysis systems, column 1, lines 63-64).

Regarding claims 55 and 65, Provost et al. further discloses an input/output unit (sensors, column 3, line 28) for communicating with a plant monitoring system.

Regarding claim 56, Provost et al. discloses after said step of analyzing, a step of removing a set of deviating data from said set of data (Abstract, lines 7-11).

Regarding claim 84, Provost et al. further discloses said data set including a plurality of measured process values from a plurality of RTD instruments (temperature sensors, column 1, line 44).

Allowable Subject Matter

Claims 15, 17, 19-22, 24-26, 28, 29, 31-37, 39-50, 66, and 85-92 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 93-101 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

Claims 1-13, 51-54, and 57-64 are allowed.

Reasons For Allowance

The **combination** as claimed wherein and recalibrating any one of said plurality of instruments that produce at least one data point in said set of deviating data (claims 1, 10-12, 31, 58, 66, 85, 93) or calculating a set of RTD deviations from said set of RTD

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data, calculating an average value and a standard deviation value from said set of RTD deviations, calculating a set of thermocouple deviations from said set of thermocouple data, and calculating an average of said set of thermocouple deviations (claims 13, 26, 64, 92) or selecting a file, loading a set of RTD data, calculating RTD averages from said set of RTD data, loading a set of thermocouple data, calculating thermocouple averages from said set of thermocouple data, and matching timeslices (claims 15, 62, 89) or removing any outliers from said data set before calculating at least one average from said data set (claim 17) or calculating an upper temperature and a lower temperature for at least one region (claims 19-21, 63, 90) or an average narrow range standard deviation value, calculating a fluctuation standard deviation value of average narrow range fluctuations, rejecting a timeslice for said fluctuation standard deviation outside a specified range, and matching thermocouple times to RTD times (claims 22, 57, 91) or calculating an average for each of said at least one table of correction deviations (claim 24) or calculating a population standard deviation for each of said at least one table of correction deviations (claim 25) or calculating a percent of removed data for at least one region (claim 28) or generating a report includes generating an RTD report (claim 29) or entering a plurality of configuration settings, each of said plurality of configuration settings containing a data value stored by said processor (claim 39) or displaying a plurality of configuration settings, each of said plurality of configuration settings containing a data value stored by said processor (claim 40) or options for printing and displaying a plurality of information associated with said process step of loading a data set (claim 41) or options for selecting a set of user selected data

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associated with said process step of selecting for analysis (claim 42) or options for displaying and printing a plurality of information associated with said process step of removing said set of deviating data (claim 43) or options for displaying and printing a plurality of information associated with said process step of analyzing said set of remaining data (claim 44) or options for loading a plurality of information associated with a process step of generating a report (claim 45) or options for displaying a plurality of information associated with a process step of generating a report (claim 46) or options for saving a plurality of information associated with a process step of generating a report (claim 47) or options for printing a plurality of information associated with a process step of generating a report (claim 48) or options for displaying and printing a plurality of recalibration information associated with said process step of recalibrating a deviating instrument (claim 49) or options for saving a plurality of recalibration information associated with said process step of recalibrating a deviating instrument (claim 50) or determining new coefficients for any one of said plurality of instruments that produce at least one data point in said set of deviating data (claims 51, 59, 60) or calculating a recalibration uncertainty value for said deviating instrument (claim 61) is not disclosed, suggested, or made obvious by the prior art of record.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-

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2277. The examiner can normally be reached on M-H.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

January 4, 2006